







PATENT

| Docket | No. | A-5720 |
|--------|-----|--------|
| | | |

Box Patent Application Commissioner of Patents and Trademarks Washington, D.C. 20231

NEW APPLICATION TRANSMITTAL

| Fransmitted herewith for filing is the patent application of $2-00$ | | | | | | |
|---|--|--|--|--|--|--|
| Inventor(s): Jürgen Schulz-Harder and Karsten Schmidt | | | | | | |
| | | | | | | |
| WARNING: Patent must be applied for in the name(s) of all of the actual inventor(s). 37 CFR 1.41(a) and 1.53(b). | | | | | | |
| For (title): PROCESS FOR PRODUCING A CERAMIC SUBSTRATE AND A CERAMIC SUBSTRATE | | | | | | |
| 1. Type of Application | | | | | | |
| This new application is for a(n) (check one applicable item below): | | | | | | |
| [X] Original | | | | | | |
| [] Design | | | | | | |
| [] Plant | | | | | | |
| WARNING: Do not use this transmittal for a completion in the U.S. of an International Application under 35 U.S.C. 371(c)(4) unless the International Application is being filed as a divisional, continuation or continuation-in-part application. | | | | | | |
| NOTE: If one of the following 3 items apply, then complete and attach ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF A PRIOR U.S. APPLICATION CLAIMED. | | | | | | |
| [] Divisional | | | | | | |
| [] Continuation | | | | | | |
| [] Continuation-in-part (CIP) | | | | | | |
| CERTIFICATION UNDER 37 CFR 1.10 | | | | | | |
| I hereby certify that this New Application Transmittal and the documents referred to as enclosed therein are being deposited with the United States Postal Service on this date in an envelope as "Express Mail Post Office to Addressee" Mailing Label Numberaddressed to the: Commissioner of Patents and Trademarks, Washington, D.C. 20231. | | | | | | |
| (Type or print name of person mailing paper) | | | | | | |
| (Signature of person mailing paper) | | | | | | |

NOTE: Each paper or fee referred to as enclosed herein has the number of the "Express Mail" mailing label placed thereon prior to mailing 37 CFR 1.10(b).

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| 2. Be | nefit of | Prior | U.S. | Application(s) | (35 USC | 120) |
|-------|----------|-------|------|----------------|---------|------|
|-------|----------|-------|------|----------------|---------|------|

NOTE: If the new application being transmitted is a divisional, continuation or a continuation-in-part of a parent case, or where the parent case is an International Application which designated the U.S., then check the following item and complete and attach ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OR PRIOR U.S. APPLICATION(S) CLAIMED.

[] The new application being transmitted claims the benefit of prior U.S. application(s) and enclosed are ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.

| 3. | Papers Enclosed which are Required for Filing Date under 37 CFR 1.53(b)(Regular) or 37 CFR |
|----|--|
| | 1.153(Design) Application |

- 12 Pages of Specification
- 3 Pages of Claims
- _1 Pages of Abstract
- 2 Sheets of Drawing
 - [] Formal
 - [X] Informal

WARNING:

DO NOT submit original drawings. A high quality copy of the drawings should be supplied when filing a patent application. The drawings that are submitted to the Office must be on strong, white, smooth, and non-shiny paper and meet the standards according to § 1.84. If corrections to the drawings are necessary, they should be made to the original drawing and a high-quality copy of the corrected original drawing then submitted to the Office. Only one copy is required or desired. Comments on proposed new 37 CFR 1.86. Notice of March 9, 1988 (1990 O.G. 57-62).

NOTE: "Identifying indicia such as the serial number, group art unit, title of invention, attorney's docket number, inventor's name, number of sheets, etc., not to exceed 2¾ (7.0 cm) in width may be placed in a centered location between the side edges within three fourths inch (19.1 mm) of the top edge. Either this marking technique on the front of the drawing or the placement, although not preferred, of this information and the title of the invention on the back of the drawings is acceptable". Proposed 37 CFR 1.84(1). Notice of March 9, 1988 (1990 O.G. 57-62).

4. Additional Papers Enclosed

| [X]F | Preliminary Amendment |
|-------|--|
| []1 | nformation Disclosure Statement |
| [] F | Form PTO-1449 |
| [](| Citations |
| [] [| Declaration of Biological Deposit |
| | Submission of "Sequence Listing," computer readable copy and/or amendment pertaining thereto for biotechnology invention containing nucleotide and/or amino acid sequence. |
| []/ | Authorization of Attorney(s) to Accept and Follow Instructions from Representative. |
| [] { | Special Comments |
| (X) | Other - Verified Translations, Marked-up Copy of Specification |

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| 5. | De | clarat | ion or Oath | | | | | |
|------------|--|-----------------|---|--|--|--|--|--|
| | | Enclo | osed uted by <i>(check all applicable boxes)</i> | | | | | |
| | | [] inventor(s) | | | | | | |
| | [] legal representative of inventor(s). 37 CFR 1.42 or 1.43 | | | | | | | |
| | | [] | joint inventor or person showing a proprietary interest on behalf of inventor who refused to sign or cannot be reached. | | | | | |
| | | | [] this is the petition required by 37 CFR 1.47 and the statement required by 37 CFR 1.47 is also attached. See Item 13 below for fee. | | | | | |
| | [X] |) No | ot Enclosed. | | | | | |
| и | VARN | IING: | Where the filing is a completion in the U.S. of an International Application but where a declaration is now available or where the completion of the U.S. application contains subject matter in addition to the International Application, the application may be treated as a continuation or continuation-in-part, as the case may be, utilizing ADDED PAGE FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION CLAIMED. | | | | | |
| | | [] | Application is made by a person authorized under 37 CFR 1.41(c) on behalf of <i>all</i> the inventor(s). The declaration or oath, along with the surcharge required by 37 CFR 1.16(e) can be filed subsequently. | | | | | |
| N | OTE: | It is in | nportant that all the correct inventor(s) are named for filing under 37 CFR 1.41(c) and 1.53(b). | | | | | |
| | | [] | Showing that the filing is authorized. (Not required unless called into question. 37 CFR 1.41(d)). | | | | | |
| 6. | Inv | vento | rship Statement | | | | | |
| и | VARN | IING: | If the named inventors are each not the inventors of all the claims, an explanation, including the ownership of the various claims at the time the last claimed invention was made, should be submitted. | | | | | |
| T | he ir | nvent | orship for all the claims in this application are: | | | | | |
| | [X |]The | same | | | | | |
| | | | or | | | | | |
| | [] | | not the same. An explanation, including the ownership of the various claims at the the last claimed invention was made, | | | | | |
| | | [] | is submitted. | | | | | |
| | | [] | will be submitted. | | | | | |
| 7 . | La | ngua | ge | | | | | |
| N | OTE: | Englis | plication including a signed oath or declaration may be filed in a language other than English. A verified h translation of the non-English language application and the processing fee of \$130.00 required by 37 CFR k) is required to be filed with the application or within such time as may be set by the Office. 37 CFR d). | | | | | |
| N | OTE: | A nor | e-English oath or declaration in the form provided or approved by the PTO need not be translated. 37 CFR b). | | | | | |
| | | [X] | English | | | | | |
| | | [] | non-English | | | | | |
| | | | [X] the attached translation is a verified translation. 37 CFR 1.52(d). | | | | | |
| | | | (Application Transmittal [4-1]-page 3 of 7) | | | | | |
| | | | | | | | | |

| 8. Assignn [] An a —— | | the invention to | |
|-----------------------------|----------------|--|--|
| [] | | (A separate "ASSIGNMENT COVE PLICATION" is also attached. | R LETTER ACCOMPANYING NEW |
| | | ibmitted with a new application, send two se lotice of May 4, 1990 (1114 O.G. 77-78). | parate letters-one for the application and one |
| 9. Certified | d Copy | | |
| Certified c | opy(ies) of ap | plication(s) | |
| Germa | any | 196 03 822.7-42 | 02-02-96 |
| (cou | ntry) | (appln. no.) | (filed) |
| (cou | ntry) | (appln. no.) | (filed) |
| (cou | ntry) | (appln. no.) | (filed) |
| | | | |

from which priority is claimed.

[] is (are) attached.

[X] will follow.

NOTE: The foreign application forming the basis for the claim for priority must be referred to in the oath or declaration. 37 CFR 1.55(a) and 1.63.

NOTE: This item is for any foreign priority for which the application being filed directly relates. If any parent U.S. application or International Application from which this application claims benefit under 35 U.S.C. 120 is itself entitled to priority from a prior foreign application then complete item 18 on the ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.

10. Fee Calculation (37 CFR 1.16)

A. [X] Regular application

| CLAIMS AS FILED Number Filed Number Extra Rate Basic Fee | | | | |
|--|---|------------|-------------------|--|
| Total Claims 37 CFR 1.16(c) 18 - 20 | = | x \$ 22.00 | \$ 770.00 = \$ | |
| 37 CFR 1.16(c) <u>18</u> - 20 Independent Claims 37 CFR 1.16(b) 2 - 3 | = | x \$ 80.00 | = \$ | |
| Multiple Dependent Claim(s), if any 37 CFR 1.16(d) | | | = \$ 260.00 | |

| [] | Amend | ment | cancelling | extra | claims | enclose | d. |
|-----|-------|------|------------|-------|--------|---------|----|
|-----|-------|------|------------|-------|--------|---------|----|

- [] Amendment deleting multiple-dependencies enclosed.
- [] Fee for extra claims is not being paid at this time.

NOTE: If the fees for extra claims are not paid on filing, they must be paid or the claims cancelled by amendment, prior to the expiration of the time period set for response by the Patent and Trademark Office in any notice of fee deficiency. 37 CFR 1.16(d).

| Filing Fee Calculatio | n \$_ | 770.00 | |
|-----------------------|-------|----------------|-----------|
| (Application Tra | nsmi | ttal [4-1]-pag | e 4 of 7) |

| Ð. I | Design Application (\$310.00-37 CI | | Filing Fee Calculati | on \$ | | | |
|---|---|---|--|---|--|--|--|
| C. [] Plant Application (\$510.00-37 CFR 1.16(g)) | | | - | | | | |
| | | | Filing Fee Calculati | on \$ | | | |
| 11. Sı | mall Entity Stater | nent(s) | | | | | |
| [] | Verified Statement(s) that this is a filing by a small entity under 37 CFR 1.9 and 1.23 is(are) attached. | | | | | | |
| | | lation (50% of A, | | \$ | | | |
| NOTE | | | unded if a verified statement and full fee. 37 CFR 1.26(a). | a refund request are filed within 2 | | | |
| 12. R | equest for Interna | ntional-Type Search | (37 CFR 1.104(d)) (<i>comp</i> | lete, if applicable) | | | |
| [] | | an international-ty ation on the merits | | pplication at the time when | | | |
| 13. Fe | e Payment Being | Made at this Time | • | | | | |
| [X] | | ee is to be paid at on be paid subsequ | | urcharge required by 37 CFR | | | |
| [] | Enclosed [] Basic Filin | a Fee | | \$ | | | |
| | [] Recording | Assignment CFR 1.21(h)) | | \$ | | | |
| | all the invo of the invo to sign or | e for filing by othe entors or person or entor where invent cannot be reached 47 and 1.17(h)) | n behalf or refused | \$ | | | |
| | specificati | ssing an application on in a non-English 7 CFR 1.52(d) and | language. | \$ | | | |
| | | g and retention fee 7 CFR 1.53(d) and | 1.21(I)) | \$ | | | |
| | [] Fee for int (37 CFR 1 | ernational-type sea .21(e)) | arch report | \$ | | | |
| NOTE | complete the applic indicate that in orde | ation pursuant to 37 Cl er to obtain the benefit | FR 1.53(d) and this, as well as the | on which is abandoned for failing to changes to 37 CFR 1.53 and 1.78, the basic filing fee must be paid or n notification under § 53(d). | | | |
| | | Total | Fees Enclosed | \$ | | | |

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| 14. N | lethod | of Payment of Fees | | | | | |
|--------|---|--|---|--|--|--|--|
| [|] Chec | ck in the amount of \$ | | | | | |
| [| [] Charge Account No. <u>08-2455</u> in the amount of \$ A duplicate copy of this transmittal is attached. | | | | | | |
| NOTE | : Fees | should be itemized in such a manner the | at it is clear for which purpose the fees are paid. 37 CFR 1.22(b). | | | | |
| 15. A | uthori | zation to Charge Additional Fee | s | | | | |
| WAR | NING: | If no fees are to be paid on filing, the | following items should not be completed. | | | | |
| WAR | NING: | Accurately count claims, especially me claim charges are authorized. | ultiple dependent claims, to avoid unexpected high charges, if extra | | | | |
| [| | | red to charge the following additional fees by this paper nis application to Account No. <u>08-2455</u> . | | | | |
| | [] | 37 CFR 1.16(a), (f) or (g) (filin | g fees) | | | | |
| | [] | 37 CFR 1.16(b), (c) and (d) (p | resentation of extra claims) | | | | |
| NOTE | only b | be paid or these claims cancelled by an e PTO in any notice of fee deficiency (3 | le dependent claims not paid on filing or on later presentation must nendment prior to the expiration of the time period set for response 7 CFR 1.16(d)), it might be best not to authorize the PTO to charge dealing with amendment after final action. | | | | |
| | [] | 37 CFR 1.16(e) (surcharge for later than the filing date of the | filing the basic filing fee and/or declaration on a date application) | | | | |
| | [] | 37 CFR 1.17 (application proc | essing fees) | | | | |
| WAR | NING: | should be made only with the knowled | deal with extensions of time under § 1.136(a), this authorization get that: "Submission of the appropriate extension fee under 37 CFR ast or petition for extension is filed." (Emphasis added). Notice of | | | | |
| | [] | 37 CFR 1.18 (issue fee at or b CFR 1.311(b)) | pefore mailing of Notice of Allowance, pursuant to 37 | | | | |
| NOTE | of All | e an authorization to charge the issue foo owance, the issue fee will be automatic lowance. 37 CFR 1.311(b). | ne to a deposit account has been filed before the mailing of a Notice ally charged to the deposit account at the time of mailing the Notice | | | | |
| NOTE | the a | pplicationprior to paying, or at the til | change in loss of entitlement to small entity status must be filed in me payingIssue Fee". From the wording of 37 CFR 1.26(b): (a) de even if the fee is paid as "other than a small entity" and (b) no other small entity. | | | | |
| 16. Ir | nstruct | tions as to Overpayment | | | | | |
| D | K]Cred | lit Account No. <u>08-2455</u> . | | | | | |
| [|] Refu | ind | Stewart L. Letter | | | | |
| | | 1 | SIGNATURE OF ATTORNEY | | | | |
| Reg. N | No. 31 | ,256 - | Stewart L. Gitler Type or print attorney name | | | | |
| Γel. N | o. (70 | 3) 415-0100 | Hoffman, Wasson & Gitler, P.C. | | | | |
| | | | 2361 Jefferson Davis Highway | | | | |
| | | | Suite 522 | | | | |
| | | | Arlington, VA 22202 | | | | |

[] Incorporation by reference of added pages

Check the following item if the application in this transmittal claims the benefit of prior U.S. application(s) (including an international application entering the U.S. stage as a continuation, divisional or C-I-P application) and complete and attach the ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED

| [] Plus Added Pages for New Application Transmittal Where Benefit of Prior U.S. Application(s) Claimed |
|--|
| Number of pages added |
| [] Plus Added Pages For Papers Referred To In Item 4 Above Number of pages added |
| [] Plus "Assignment Cover Letter Accompanying New Application" Number of pages added |

[] Statement Where No Further Pages Added

(If no further pages form a part of this Transmittal then end this Transmittal with this page and check the following item)

[X]This transmittal ends with this page.



VERIFICATION OF TRANSLATION

I, Joseph Crabbs, a translator with Chillson Translating Service, 3326 Brantly Road, Glenwood, Maryland 21738, hereby declare as follows:

That I am familiar with the German and English languages;

That I am capable of translating from German to English;

That the translation attached hereto is a true and accurate translation of the German application titled,

"Process for producing a ceramic substrate and a ceramic substrate;"

That all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true;

And further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any registration resulting therefrom.

By Joseph W Crabbs

Executed this 30 day of January 1997.